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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Forward-Looking Mechanism for High Cost Support for Non-Rural LECs	)	CC Docket No. 97-160

TO: THE COMMISSION

REPLY COMMENTS OF PUERTO RICO TELEPHONE COMPANY

Puerto Rico Telephone Company ("PRTC") hereby submits reply comments in response to the Commission's Further Notice of Proposed Rulemaking[1] regarding the development of a model intended to estimate the cost of providing universal service by non-rural carriers serving high cost areas.

PRTC renews its objection to the grouping of non-rural carriers serving insular areas, such as Puerto Rico, with all other non-rural carriers for purposes of determining universal service support.[2] PRTC cannot fully assess either Hatfield or BCPM at this time. As PRTC previously has informed the Commission, the models have not been populated with Puerto Rico

1. CC Docket 96-45, FCC 97-256 (rel. July 18, 1997).

2. On July 17, 1997, PRTC filed a Petition for Reconsideration with the Commission addressing this issue.

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data. This fact precludes PRTC from providing detailed responses to the Commission for assessing the models' operation for Puerto Rico. Nevertheless, PRTC makes the following general comments on outside plant issues.

I. OUTSIDE PLANT MIX

BCPM and Hatfield fail to incorporate terrain factors to make decisions about outside plant mix. Recognizing this serious shortcoming of each model, the Commission tentatively concludes that the selected model should assign more cable to aerial installation for wire centers characterized by hard rock. FNPRM at ¶ 58. Although the Commission's conclusion may be correct for some carriers, conditions in Puerto Rico suggest that assigning more cable to aerial installation for hard rock areas could lead to unreliable predictions of the cost of universal service. For instance, because of the extreme humidity and severe tropical storms that affect Puerto Rico,[3] PRTC buries feeder and distribution cable where it can. On the other hand, despite its preference to bury cable, PRTC must deploy aerial cable to serve much of the island's interior where a rugged mountain chain, with peaks exceeding 4,000 feet, often makes burying cable impracticable.

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3. PRTC disagrees that "adding climate condition inputs is unlikely to produce more accurate cost estimates." AT&T/MCI Comments at 5 (filed September 24, 1997). In Puerto Rico, for example, many radio towers are reinforced to withstand hurricane force winds at substantial cost. Moreover, there are higher outside plant maintenance costs associated with the extreme humidity in Puerto Rico.

II. INSTALLATION AND CABLE COSTS

PRTC supports the Commission's tentative conclusion that the selected model should prescribe additional installation costs to account for additional expense caused by difficult terrain. FNPRM ¶ 66. Actual installation cost can vary substantially by location in Puerto Rico. Terrain, such as the island's rugged mountains, is a significant factor that affects installation cost. See Florida PSC Comments at 5 (filed September 24, 1997) ("terrain and density are the primary cost drivers for cable installation"). In fact, PRTC's cost for installation as reported in the company's construction cost records do vary by region.

III. DROPS

The Commission asks whether the selected model should estimate drop lengths (BCPM) or incorporate predetermined drop length assumptions (Hatfield). FNPRM ¶ 74. Both models fail to accurately predict drop lengths for Puerto Rico. The address system in Puerto Rico assigns a common address to houses located on a private side road. The address refers to a point on the state road intersected by the private road. Of course houses located on a private side road, some of which are very lengthy, will have disparate drop lengths. A model that estimates or assigns uniform drop lengths for such a multi-house uniform address will not reliably predict cost.

IV. STRUCTURE SHARING

Structure sharing involves the shared use of poles, trenches and conduits with other utilities. BCPM assumes that telecommunications carriers engage in modest structure sharing while Hatfield assumes substantial sharing. Hatfield's default input values assign between 25 and 50 percent of the costs of shared facilities to telephone companies. The Commission believes the selected model should adopt BCPM's categories for installation activities and terrain conditions related to structure sharing, but use Hatfield's line density zones to estimate sharing.

Most PRTC conduit is full to capacity and does not lend itself to sharing in urban and new suburban areas. PRTC does share poles in urban areas with the power company. However, there is little sharing in rural areas because the power company does not follow the roads whereas PRTC does as part of its committed effort to provide universal service in Puerto Rico.[4] See Rural Utilities Service Comments at 2 (filed September 24, 1997) ("If models are going to persist in placing feeder and distribution plants along hypothetical routes that do not follow roads, significant additional costs are going to have to be included in plant estimates.").

4. Subscribership, albeit fast improving in Puerto Rico, is only 74% islandwide and as low as 50% in some areas.

V. LOOP DESIGN

Hatfield calculates loop costs based on very long copper loops using loading coils, while BCPM includes more fiber in its loop design. BCPM uses a fiber-copper cross-over of 12,000 feet while Hatfield assumes feeders greater than 9,000 feet will be fiber. The Commission tentatively concludes that it should adopt BCPM's approach of installing optical fiber in the network to avoid loading coils. FNPRM ¶ 87. An arbitrarily set fiber-copper cross-over of 12,000 feet could lead to under or over estimating actual costs. For example, if density warrants it, PRTC may cross over to fiber at less than 12,000 feet. See TDS Telecommunications Corporation Comments at 11 (filed September 24, 1997) ("There is not one specific fiber-copper cross-over point that can be assumed across-the-board for all types of service territory.").

VI. LOOP STANDARDS

The Commission asks whether it should adopt any loop design standards in the selected model. Revised Resistance Design permits copper loops up to 18,000 feet and will support a data speed of 1.544 Mbps. Carrier Serving Area (CSA) permits copper loops up to 12,000 feet and will support data speeds up to 6 Mbps. If the Commission specifies a loop design standard, PRTC urges it to adopt the CSA standard which is deployed in Puerto Rico.

VII. DIGITAL LOOP CARRIERS

The Commission seeks comment on the models' assumptions regarding the number of subscriber lines that should trigger the use of a "large" DLC. BCPM assumes a large DLC for more that 672 subscriber lines, while Hatfield switches to the larger DLC at 384 subscriber lines. Demand curves for a particular area dictate whether a carrier will install a large DLC. In Puerto Rico, which is experiencing dramatic growth in telephone subscribership, demand curves in many exchange areas tend to be rather steep. Thus, PRTC may install a large DLC in an area with less than the specified BCPM or Hatfield large DLC thresholds because future growth warrants a large DLC.

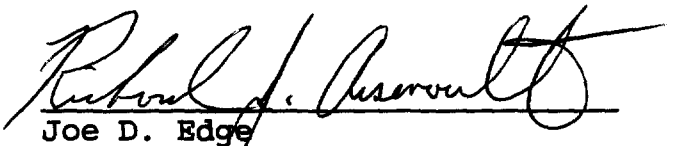
VIII. WIRELESS THRESHOLD

BCPM attempts to account for the possibility that wireless technology may be less expensive than wireline technology, but Hatfield does not. BCPM assumes that if the loop investment to serve a single customer exceeds $10,000 a carrier would substitute wireless service. The Commission asks whether the cost of a loop should be capped at $10,000 in all cases. PRTC urges the Commission not to arbitrarily cap the investment per subscriber at $10,000. The cost of some PRTC rural loops exceeds $10,000. See also GTE Service Corporation Comments at 14 (filed September 24, 1997) ("the $10,000 threshold for loop costs included in BCPM is simply not realistic").

IX. CONCLUSION

Although the models have not been populated with Puerto Rico data, the foregoing comments demonstrate that, as applied to Puerto Rico, the BCPM and Hatfield are seriously flawed. PRTC therefore reiterates its request that the Commission establish a process for review and evaluation of the models as they pertain to insular areas. This process should allow adequate time for population of the models with Puerto Rico data, as well as review and testing of their results. Until a model is validated for application to Puerto Rico, PRTC will not have any meaningful opportunity to participate in assessing and providing input for the selection of one of the existing models, or the development of a hybrid model.

Respectfully submitted,



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CERTIFICATE OF SERVICE

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